



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,272	08/26/2008	Hakan Fortell	43315-236057	8687

26694 7590 06/07/2011  
VENABLE LLP  
P.O. BOX 34385  
WASHINGTON, DC 20043-9998

EXAMINER
----------

AMIN, BHAVESH V

ART UNIT	PAPER NUMBER
----------	--------------

3664

MAIL DATE	DELIVERY MODE
-----------	---------------

06/07/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/593,272	<b>Applicant(s)</b> FORTELL ET AL.	
	<b>Examiner</b> BHAVESH V. AMIN	<b>Art Unit</b> 3664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 & 3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Watanabe et al., US Patent 5,333,242 (hereafter referenced as Watanabe), or further in view of Brantmark et al., US patent 4,888,708 (hereafter referenced as Brantmark).

Regarding claims 1 & 3 where it is disclosed by Watanabe to have the method and system for:

“A system including at least two manipulators namely robots and/or external axes, each manipulator controlled by a control system and programmed to carry out a plurality of tasks [figure 1], the system comprising a handheld control tool [column 4 lines 30-40] for manually manipulating the manipulators, said hand held control tool comprising communication means communicating with the control system [column 4 lines 30 -49] wherein each manipulator is movably oriented in a first coordinate system, and a second coordinate system is defined for each manipulator so that one part of said manipulator stands still in the second coordinate system, and wherein each second coordinate system is movable relative to the first coordinate system [column 4 lines 49-68 & column 5 lines 1-68], the system is adapted to: select one of said manipulators as

Art Unit: 3664

a leading manipulator, create a memory list including all manipulators that are to be moved synchronously with the leading manipulator, receive a movement command from the hand held control tool [column 4 lines 15-68], create a move order for the leading manipulator, based on the received movement command and the current position of the leading manipulator [column 4 lines 15-68], and create move orders for the remaining manipulators in the memory list, such that said parts of the manipulators, which stand still in the second coordinate systems, are moved such that they keep their relative positions relative to the second coordinate system of the leading manipulator [column 5 lines 1 – 68 & column 6 lines 1 – 68].”

However if applicant finds that the hand held device is not inherently disclosed in Watanabe then this is disclosed by Brantmark in figure 4. Thus it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Watanabe by Brantmark to allow for the programming device to be portable and easily carried by the user of the robot.

Regarding claim 3, this is the corresponding method claim for apparatus claim 1 and is thus rejected for the same reasons as stated for claim 1 above.

“A method for controlling a system of manipulators including at least two manipulators, namely robots and/or external axes, each manipulator controlled by a control system and programmed to carry out a plurality of tasks [figure 1], wherein each manipulator is movably oriented in a first coordinate system [fig 1], the system comprising a handheld control tool for manually manipulating the manipulators [column 4 lines 30-40], said hand held control tool comprising communication means

Art Unit: 3664

communicating with the control system wherein the method comprises [column 4 lines 49-68 & column 5 lines 1-68]: defining a second coordinate system for each manipulator so that one part of said manipulator stands still in the second coordinate system, and that each second coordinate system is movable relative to the first coordinate system, selecting one of said manipulators as a leading manipulator [columns 5 & 6], creating a memory list including all manipulators that are to be moved synchronously with the leading manipulator, receiving a movement command from the hand held control tool [column 5 & 6], creating a move order for the leading manipulator, based on the received movement command and the current position of the leading manipulator, and creating move orders for the remaining manipulators in the memory list [columns 4-6], such that said parts of the manipulators, which stand still in the second coordinate systems, are moved such that they keep their relative positions relative to the second coordinate system of the leading manipulator [columns 4-6].”

However if applicant finds that the hand held device is not inherently disclosed in Watanabe then this is disclosed by Brantmark in figure 4. Thus it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Watanabe by Brantmark to allow for the programming device to be portable and easily carried by the user of the robot.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 3664

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 & 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe and further in view of Brantmark.

Regarding claims 2 & 4 where all the limitations of claims 1 & 3 are disclosed by Watanabe who does not specifically disclosed the further limitation of, "hand held control tool comprises a manipulator input means in a form of a joystick." This is disclosed by Brantmark in figure 4; thus it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Watanabe by Brantmark to allow for the programming device to be portable and easily carried by the user of the robot.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BHAVESH V. AMIN whose telephone number is (571)270-3255. The examiner can normally be reached on M - T, Friday off, 7:30am to 6:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3664

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BHAVESH V AMIN/

Examiner, Art Unit 3664

/KHOI TRAN/

Supervisory Patent Examiner, Art Unit 3664